

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***PERMIT STATEMENT OF BASIS***

DRAFT

Conditional Major / Synthetic Minor, Operating

Permit: F-07-021

Goodrich Corporation

Calvert City, KY 42029

March 8, 2007

Carolina Alonso, Reviewer

SOURCE ID: 21-157-00004

SOURCE A.I. #: 2919

ACTIVITY ID: APE20070001

**SOURCE DESCRIPTION:**

On December 6, 2006, the public notice on availability of the draft permit F-06-057 and supporting material for comments by persons affected by the plant was published in *The Tribune-Courier* in Benton, Kentucky. After receiving comments on the draft permit for the facility, the Division has decided to re-issue draft permit F-06-057, as permit F-07-021.

The property is owned by Goodrich Corporation, and is a Superfund site. There are no process units associated with the site, only equipment related to the remediation activities. Goodrich Corporation is responsible for the Superfund remediation activities and associated emissions.

A groundwater treatment system is operated for the remediation at the Superfund site and in conjunction with a Resource Conservation and Recovery Act (RCRA) Part B permit. A series of groundwater extraction wells are located along the northern perimeter of the facility to recover up to 1,000 gallons per minute of groundwater. These wells, including five at the Superfund site, essentially form a barrier that prevents groundwater beneath the facility from discharging to the Tennessee River. A steam stripper removes the organics from the extracted groundwater. A regenerable carbon vapor adsorption unit collects the vent organics and recycles them back to the process. Alternate controls for the vent organics are Westlake Vinyls Inc. (Westlake) Oxy and Primary Incinerators (Westlake's emission points 453 and 530). The system will also treat organic vapors from a vapor extraction system at the Superfund site.

The Superfund soil vapor extraction system consists of extraction wells, a knockout pot, carbon beds, and a vacuum pump. The wells, under negative pressure, feed a knockout pot where moisture is removed. The vapor stream then travels across two vapor beds in series where the organics are adsorbed onto the carbon. After passing through the carbon beds, the air stream then enters the vacuum pump that discharges to the atmosphere. The carbon beds at the Superfund site are used as alternate, backup controls to the regenerable carbon system associated with the steam stripper or Westlake's incinerators. Also operated at the Superfund site is a leachate collection transfer tank and its associated equipment.

Additionally, an air sparging/soil vapor extraction (AS/SVE) operation has been constructed but is not currently in operation. The AS/SVE is planned (under negotiation) to be vented to Westlake's Primary Incinerator (Westlake's emission point 530). This operation is another technique used as a

corrective action method to remove organics from soil. This operation involves venting the soil, which amounts to vacuuming organic vapors from the soils above the water table, passing them through a knockout pot to remove any moisture, then through a vacuum pump. Five separate AS/SVE systems are located at the facility. The discharge from the vacuum pumps is planned to be vented to Westlake's Primary Incinerator. A pilot AS/SVE project was permitted in 1996 to test the technique. This pilot project was expanded into the current AS/SVE operation, and the KDAQ determined that a new permit was not needed. In this application, the AS/SVE operation retained the emission point number (081) which was assigned to the original pilot bioventing operation.

**COMMENTS:**

*Type of control and efficiency*

As mentioned before, the following incinerators belong to Westlake and are used as alternative control devices to the carbon bed adsorber:

Oxy Incinerator (EP 453)

Capacity: 67.1 mmBtu/hr

Fuel: Process gas and combined gaseous waste with supplemental natural gas

Controls: Packed wet scrubber following incinerator for acid gas

Constructed: 1982

Primary Thermal Incinerator (EP 530)

Capacity: 60.0 mmBtu/hr

Fuel: Process gas and combined gaseous waste with supplemental natural gas

Controls: Quench, absorber, and packed wet scrubber following incinerator for acid gas

Constructed: 1977

If Westlake's incinerators are used as controls by Goodrich Corporation for emission units in permit F-07-021 (048-Groundwater Stripping System, 081-AS/SVE Operation, or 082—Superfund Remediation Vapor Recovery), the proper operation of the incinerators is demonstrated by compliance of Westlake with 40 CFR 63 Subpart G. If Westlake is not operating the incinerators to show compliance with 40 CFR 63 Subpart G, then the requirement for documentation evidencing at least 95% destruction efficiency for the time of use on a 12-month rolling average basis must be met.

*Applicable regulations*

None

*Applicable regulations for Westlake Vinyls Inc. controls that may be used by Goodrich Corporation*  
401 KAR 63:002, which incorporates by reference 40 CFR 63 Subpart G, National emission standard for organic hazardous air pollutants from the synthetic organic chemical manufacturing industry for process vents, storage vessels, transfer operations, and wastewater, applies to the Oxy Incinerator.

401 KAR 57:002, which incorporates by reference 40 CFR 61 Subpart F, National emission standard for vinyl chloride, applies to the Oxy Incinerator. However, pursuant to 40 CFR 63.110(f), the permittee is only required to comply with the provisions of 40 CFR 63 Subpart G.

*Non Applicable regulations*

40 CFR 265 Subpart CC, Standards for owners and operators of hazardous waste treatment, storage, and disposal facilities, is not promulgated under the authority of the Clean Air Act, so it is not an applicable regulation.

**EMISSION AND OPERATING CAPS DESCRIPTION:**

The source has elected to accept the following limits in order to preclude applicability of 401 KAR 52:020, Title V Permits: source-wide Volatile organic compounds (VOC) emissions shall not exceed 90 tons per year; single hazardous air pollutants (HAP) emissions shall not exceed 9 tons per year; and combined HAP emissions shall not exceed 22.5 tons per year. In order to comply with the source-wide limitations, the facility shall vent emissions to a control device from EP 048, EP 081, and EP 082 at all times these emission points are in operation. The aforementioned limits also preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of the Air Quality (PSD).

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.